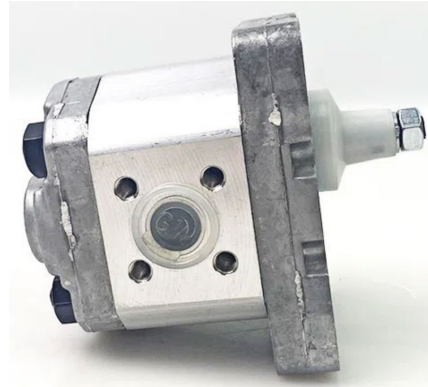
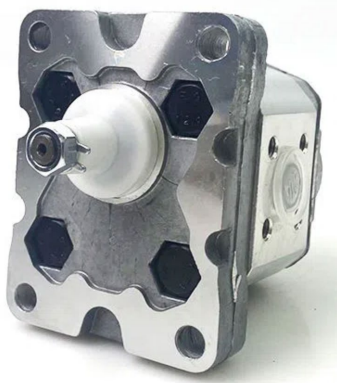




## External gear pumps AZPB



| Displacement               | V              | cm <sup>3</sup> /rev | 1                  | 2    | 2.5  | 3.15 | 4    | 4.5  | 5    | 6.3  | 7.1  |
|----------------------------|----------------|----------------------|--------------------|------|------|------|------|------|------|------|------|
| Suction pressure           | p <sub>e</sub> | bar                  | 0.7...3 (absolute) |      |      |      |      |      |      |      |      |
| Max. continuous pressure   | p <sub>1</sub> |                      | 250                | 250  | 250  | 250  | 250  | 250  | 250  | 225  | 200  |
| Max. intermittent pressure | p <sub>2</sub> |                      | 280                | 280  | 280  | 280  | 280  | 280  | 280  | 255  | 230  |
| Max. peak pressure         | p <sub>3</sub> |                      | 300                | 300  | 300  | 300  | 300  | 300  | 300  | 275  | 250  |
| Min. rotational speed      |                | rpm                  | 750                | 750  | 750  | 750  | 750  | 750  | 750  | 750  | 750  |
| Max. rotational speed      | p <sub>2</sub> |                      | 6000               | 5000 | 5000 | 4000 | 4000 | 4000 | 4000 | 3500 | 3500 |

## Single-pump type codes

|     |    |    |    |    |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|
| 01  | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 |
| AZP | B  | -  | 2  | 2  | -  |    |    |    |    |    |

### External gear unit

|    |                    |     |
|----|--------------------|-----|
| 01 | External gear pump | AZP |
|----|--------------------|-----|

### Series

|    |   |   |
|----|---|---|
| 02 | 1 cm <sup>3</sup> /rev ... 7.1 cm <sup>3</sup> /rev, Standard Performance | B |
|----|---|---|

### Series

|    |                        |   |
|----|------------------------|---|
| 03 | Bearing journal Ø12 mm | 2 |
|----|------------------------|---|

### Version

|    |                             |   |
|----|-----------------------------|---|
| 04 | Corrosion-resistant, pinned | 2 |
|----|-----------------------------|---|

### Size

|    |   |     |     |     |     |     |     |     |     |     |
|----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 05 | For geometric displacement $V_g$ [cm <sup>3</sup> ] | 1.0 | 2.0 | 2.5 | 3.1 | 4.0 | 4.5 | 5.0 | 6.3 | 7.1 |
|----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|

### Direction of rotation

|    |                          |                  |   |
|----|--------------------------|------------------|---|
| 06 | As viewed on drive shaft | Clockwise        | R |
|    |                          | Counterclockwise | L |

### Drive shaft

|    |                                   |                      |   |   |
|----|-----------------------------------|----------------------|---|---|
|    |                                   | Suitable front cover |   |   |
| 07 | Tapered shaft                     | 1 : 5                | P | C |
|    |                                   | 1 : 8                | O | H |
|    | Tang drive                        | M, Y                 | N |   |
|    | SAE J744 13-1 cylindrical         | R                    | Q |   |
|    | SAE J744 13-4 (A-A) splined shaft | R                    | R |   |

### Front cover

|    |                    |  |   |
|----|--------------------|--|---|
| 08 | 2-hole flange      | Ø32 mm   | P |
|    |                    | Ø32 mm with O-Ring                             | M |
|    |                    | Ø32 mm with O-ring, for attachment to Series F | Y |
|    |                    | SAE J744 50-2 (A-A)                            | R |
|    | Rectangular flange | Ø25.38 mm                                      | O |

### Line connection

|    |                                |    |
|----|--------------------------------|----|
| 09 | ISO 228/1 pipe thread          | 01 |
|    | DIN 3852-T1 metric thread      | 02 |
|    | SAE J1926-1 thread O-ring Boss | 12 |
|    | Square flange                  | 20 |

### Sealing material

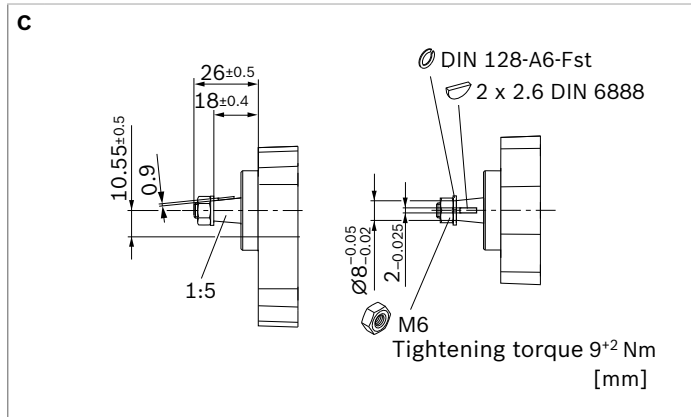
|    |                                       |   |
|----|---------------------------------------|---|
| 10 | NBR (nitrile rubber)                  | M |
|    | NBR, FKM (fluoroelastomer) shaft seal | K |
|    | FKM (fluoroelastomer)                 | P |

### Rear cover

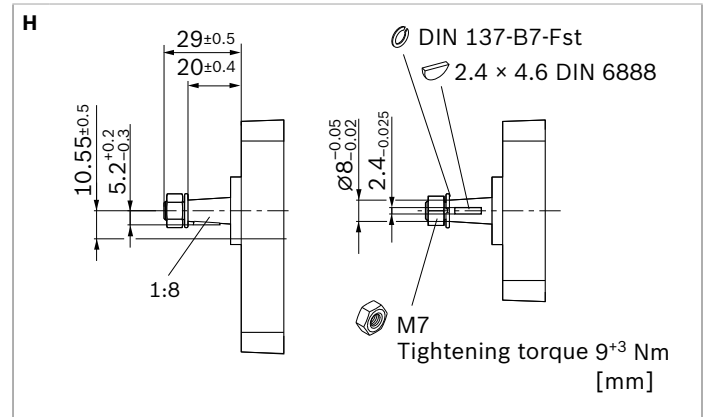
|    |                             |   |
|----|-----------------------------|---|
| 11 | Without valve (standard)    | B |
|    | Axial pressure/suction port | A |

## Dimensions - drive shaft

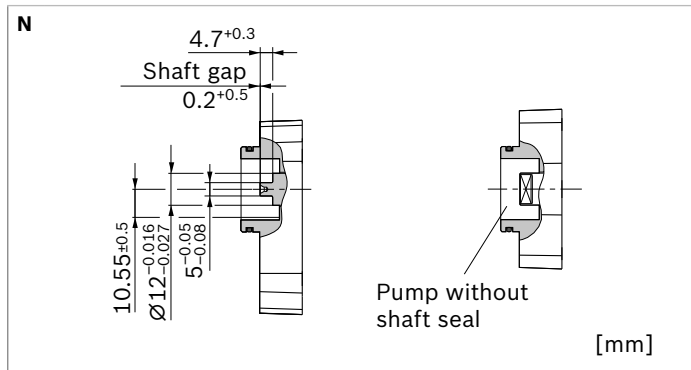
### ▼ 1:5 tapered shaft



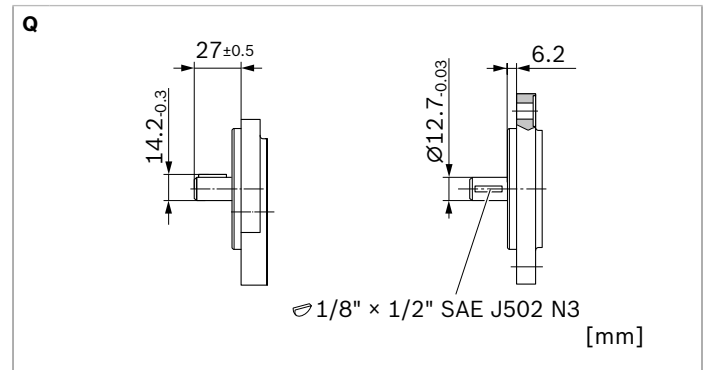
### ▼ 1:8 tapered shaft



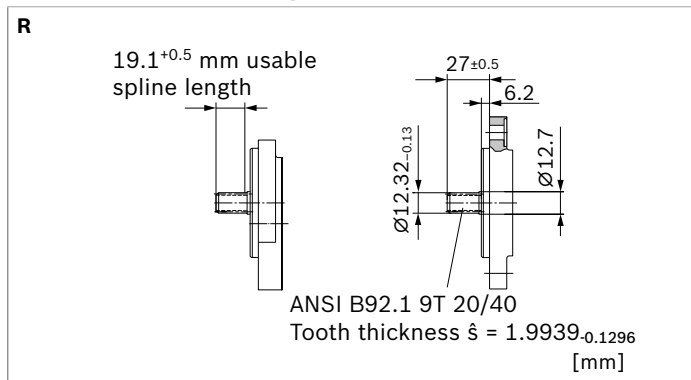
### ▼ Tang drive



### ▼ SAE J744 13-1 cylindrical

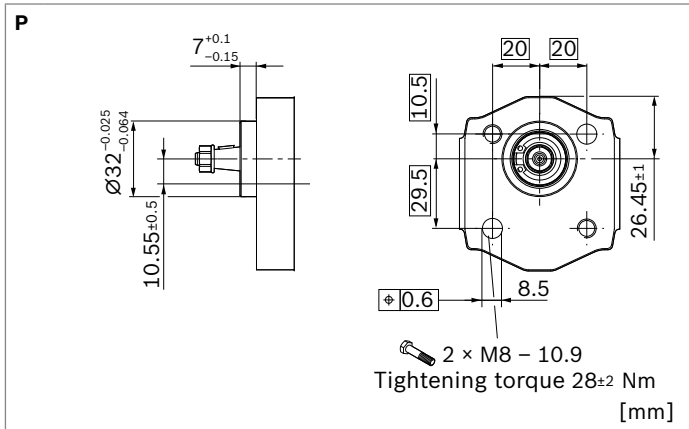


### ▼ SAE J744 13-4 (A-A) splined shaft

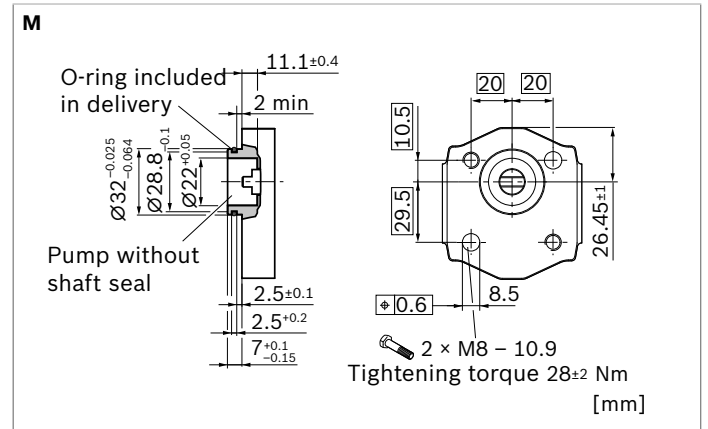


## Dimensions - front cover<sup>1)</sup>

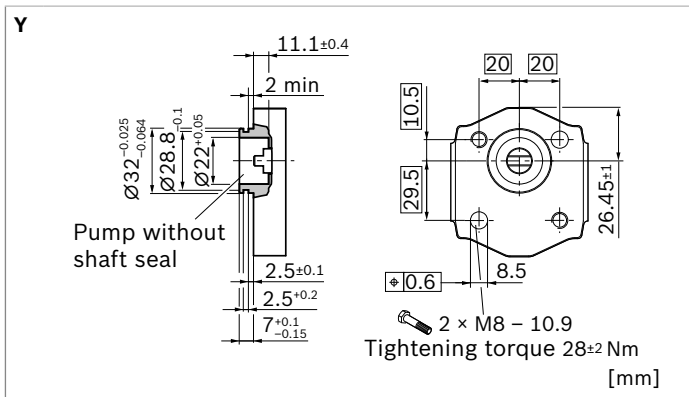
### ▼ 2-hole mounting $\varnothing 32$ mm



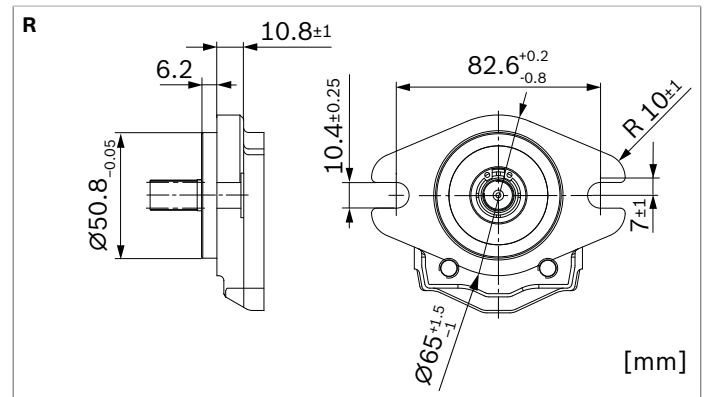
### ▼ 2-hole mounting $\varnothing 32$ mm with O-ring



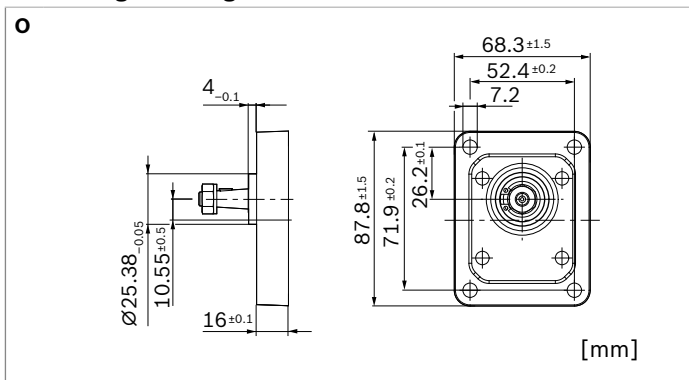
### ▼ 2-hole mounting $\varnothing 32$ mm with O-ring, for attachment to Series F



### ▼ SAE J744 50-2 (A-A)

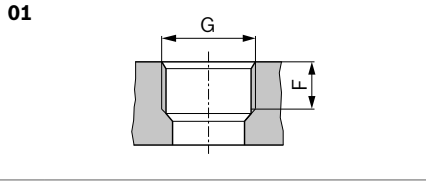


### ▼ Rectangular flange $\varnothing 25.38$ mm



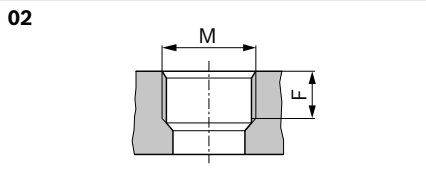
## Dimensions - line connection

### ▼ ISO 228/1 pipe thread



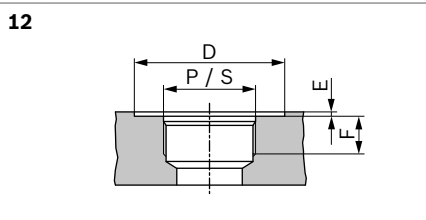
| Size        | Pressure side |         | Suction side |         |
|-------------|---------------|---------|--------------|---------|
|             | P             | F<br>mm | S            | F<br>mm |
| 1.0 ... 3.1 | G3/8          | 13      | G3/8         | 13      |
| 4.0 ... 7.1 |               |         | G1/2         | 14      |

### ▼ DIN 3852-T1 metric thread



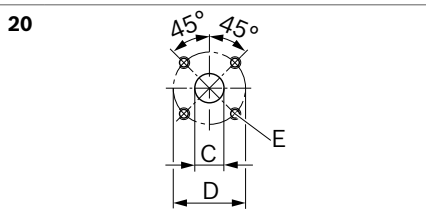
| Size        | Pressure side |         | Suction side |         |
|-------------|---------------|---------|--------------|---------|
|             | P             | F<br>mm | S            | F<br>mm |
| 1.0 ... 3.1 | M14 × 1.5     | 13      | M18 × 1.5    | 13      |
| 4.0 ... 7.1 |               |         | M22 × 1.5    | 14      |

### ▼ SAE J1926-1 thread O-ring Boss



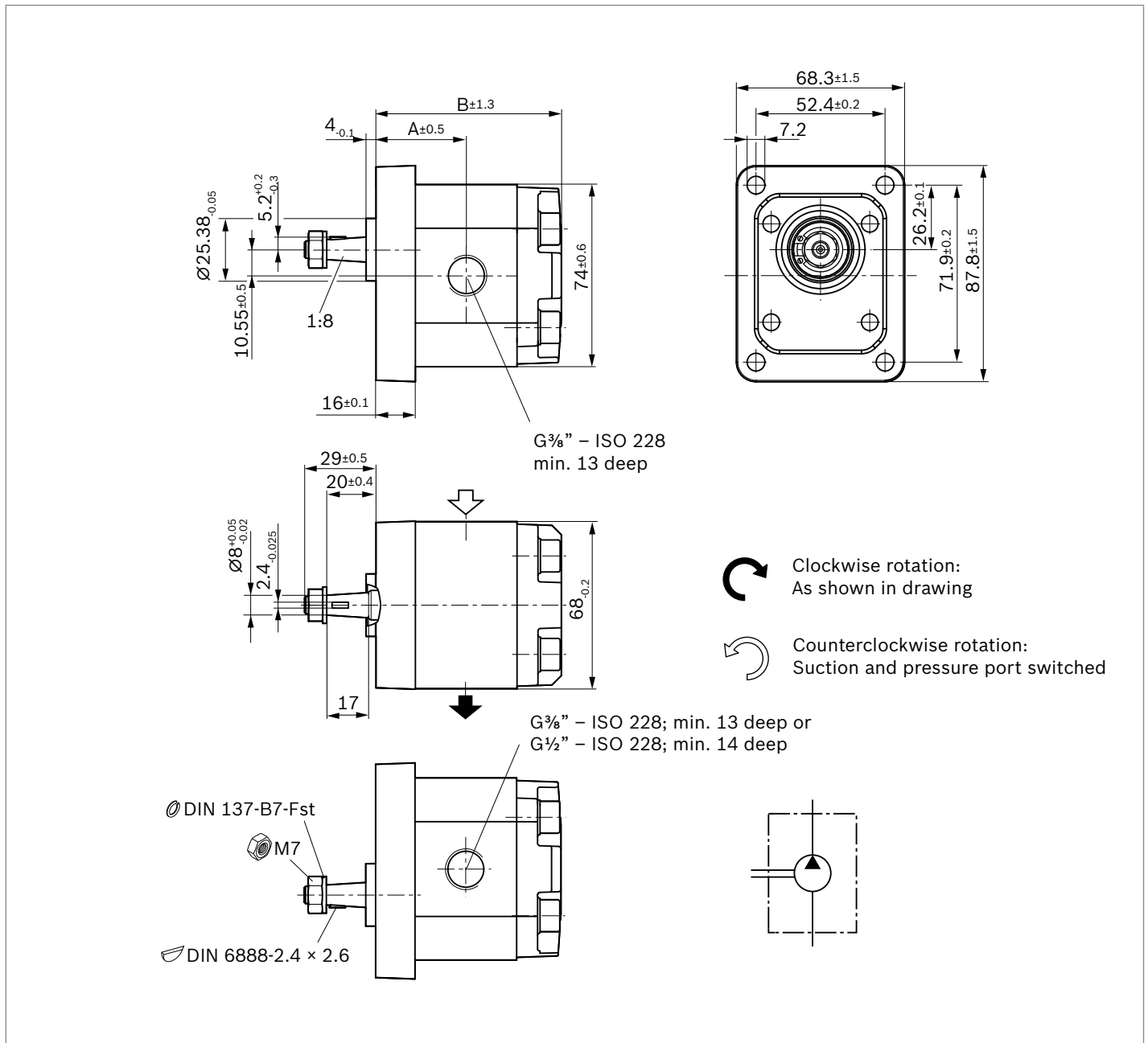
| Size        | Pressure side  |         |         | Suction side |                |         |         |         |
|-------------|----------------|---------|---------|--------------|----------------|---------|---------|---------|
|             | P              | D<br>mm | E<br>mm | F<br>mm      | S              | D<br>mm | E<br>mm | F<br>mm |
| 1.0         | 9/16-18 UNF-2B | 25      | 0.5     | 13           | 9/16-18 UNF-2B | 25      | 0.5     | 13      |
| 2.0 ... 5.0 |                |         |         |              | 3/4-16 UNF-2B  | 30      | 0.5     | 15      |
| 6.3 ... 7.1 | 3/4-16 UNF-2B  | 30      | 0.5     | 15           | 7/8-14 UN-2B   | 34      | 0.5     | 17      |

### ▼ Square flange



| Size        | Pressure side |         |               | Suction side |         |               |
|-------------|---------------|---------|---------------|--------------|---------|---------------|
|             | C<br>mm       | D<br>mm | E             | C<br>mm      | D<br>mm | E             |
| 2.0 ... 2.5 | 12            | 30      | M6; 11.5 deep | 12           | 30      | M6; 11.5 deep |
| 3.1 ... 7.1 | 15            | 35      |               | 15           | 35      |               |

▼ 1:8 tapered shaft with rectangular flange  
AZPB- ... HO1MB



| Size | Dimensions |      |         |
|------|------------|------|---------|
|      | A          | B    | Version |
| 1.0  | 30.9       | 64.1 | 3/8     |
| 2.0  | 32.8       | 67.9 | 3/8     |
| 2.5  | 33.8       | 69.8 | 3/8     |
| 3.15 | 35.0       | 72.3 | 3/8     |
| 4.0  | 36.6       | 75.5 | 1/2     |
| 4.5  | 37.6       | 77.4 | 1/2     |
| 5.0  | 38.6       | 79.5 | 1/2     |
| 6.3  | 41.0       | 84.2 | 1/2     |
| 7.1  | 42.5       | 87.3 | 1/2     |